

## 4-06 ASPHALT TREATED BASE

### 4-06.1 Description

Asphalt treated base consists of a compacted course of base material which has been weatherproofed and stabilized by treatment with an asphalt binder.

The Work shall consist of one or more courses of asphalt treated base placed on the Subgrade in accordance with these Specifications and in conformity with the lines, grades, thicknesses, and typical cross-sections shown in the Plans or as staked.

### 4-06.2 Materials

Materials shall meet the requirements of the following sections:

Asphalt	9-02.1
Anti-Stripping Additive	9-02.4
Aggregates	9-03.6

The grade of paving asphalt shall be as required in the Contract.

### 4-06.3 Construction Requirements

#### 4-06.3(1) Asphalt Mixing Plant

Asphalt mixing plants for asphalt treated base shall meet the following requirements:

##### Heating

The plant shall be capable of heating the aggregates to the required temperature.

##### Proportioning

The mixing plant shall be capable of proportioning: the aggregates to meet the Specifications; and the asphalt at the rate specified by the Engineer. If the aggregates are supplied in two or more sizes, means shall be provided for proportioning or blending the different sizes of aggregates to produce material meeting the Specification requirements.

##### Mixing

The mixer shall be capable of producing a uniform mixture of uniformly coated aggregates meeting the requirements of these Specifications.

#### 4-06.3(2) Preparation of Aggregates

Aggregates for asphalt treated base shall be stockpiled before use in accordance with the requirements of [Section 3-02](#).

The aggregates shall be heated as required by the Engineer.

#### 4-06.3(2)A Mix Design

The mix design requirements for asphalt treated base shall be as described in [Section 5-04.3\(7\)A](#).

#### 4-06.3(3) Heating of Asphalt Material

Heating of the asphalt material shall conform to the requirements of [Section 5-04.3\(6\)](#).

#### 4-06.3(4) Mixing

The asphalt treated base shall be mixed in accordance with the requirements of [Section 5-04.3\(8\)](#).

**4-06.3(5) Hauling Equipment**

Hauling equipment for asphalt treated base shall conform to the requirements of [Section 5-04.3\(2\)](#).

**4-06.3(6) Spreading and Finishing**

Asphalt treated base shall be spread with a spreading machine equipped with a stationary, vibratory, or oscillating screed or cut-off device, subject to the approval of the Engineer. Approval of the equipment shall be based on a job demonstration that the finished product will meet all requirements of the Specifications. Automatic controls will not be required.

The temperature of the mixture at the time compaction is achieved shall be a minimum of 185°F.

**4-06.3(6)A Subgrade Protection Course**

Unless otherwise specified by the Engineer, the Contractor shall place the asphalt treated base as a protection for the prepared Subgrade on all sections of individual Roadways which are to receive asphalt treated base as soon as 10,000-square yards of Subgrade is completed. This requirement shall not be limited to contiguous areas on the project.

The surface of the Subgrade protection layer when constructed on a grading project shall conform to grade and smoothness requirements that apply to the Subgrade upon which it is placed.

**4-06.3(6)B Finish Course**

The final surface course of the asphalt treated base, excluding Shoulders, shall not deviate at any point more than  $\frac{3}{8}$ -inch from the bottom of a 10-foot straightedge laid in any direction on the surface on either side of the Roadway crown. Failure to meet this requirement shall necessitate sufficient surface correction to achieve the required tolerance, as approved by the Engineer, at no expense to the Contracting Agency.

When Portland cement concrete pavement is placed on an asphalt base, the surface tolerance of the asphalt base shall be such that no elevation lies more than 0.05-feet below nor 0.00-feet above the plan grade minus the specified plan depth of Portland cement concrete pavement. Prior to placing the Portland cement concrete pavement, any such irregularities shall be brought to the required tolerance by grinding or other means approved by the Engineer, at no expense to the Contracting Agency.

**4-06.3(7) Density**

The asphalt treated base shall be compacted to a density of not less than 80-percent of the maximum theoretical density established for the mix by WSDOT FOP for AASHTO T 209. The density of the base shall be determined by means of tests on cores taken from the Roadway or with the nuclear gauge in accordance with [Section 5-04.3\(10\)B](#). The frequency of these tests shall be at the discretion of the Engineer, but in no case shall it be less than one control lot for each normal day's production. The use of equipment which results in damage to the materials or produces substandard workmanship will not be permitted.

#### **4-06.3(8) Anti-Stripping Additive**

An anti-stripping additive shall be added to the asphalt material in accordance with [Section 9-02.4](#), when directed by the Engineer.

#### **4-06.4 Measurement**

Asphalt treated base including paving asphalt will be measured by the ton.

#### **4-06.5 Payment**

Payment will be made in accordance with [Section 1-04.1](#), for each of the following Bid items that are included in the Proposal:

“Asphalt Treated Base”, per ton.

“Anti-Stripping Additive”, by force account.

“Anti-Stripping Additive” will be paid for in accordance with [Section 1-09.6](#) except that no overhead, profit or other costs will be allowed. Payment will be made only for the invoice cost of the additive. The quantity of asphalt material shall not be reduced by the quantity of anti-stripping additive. For the purpose of providing a common Proposal for all Bidders, the Contracting Agency has entered an amount in the Proposal to become a part of the total Bid by the Contractor.

